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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/511,735	02/24/2000	Michael S. Borella	99.447	5494
20306	7590	09/24/2004		
MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP 300 S. WACKER DRIVE 32ND FLOOR CHICAGO, IL 60606			EXAMINER VAUGHN JR, WILLIAM C	
			ART UNIT 2143	PAPER NUMBER

DATE MAILED: 09/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/511,735	Applicant(s) BORELLA ET AL.	
	Examiner William C. Vaughn, Jr.	Art Unit 2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

W W

DETAILED ACTION

1. This Action is in regards to the Amendment and Response received on 19 May 2004.

Response to Arguments

2. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mattaway et al. (Mattaway, U.S. Patent No. 6,185,184 in view of Zhang et al. (Zhang), U.S. Patent No. 6,381,646.

5. Regarding **claim 1**, Mattaway discloses the invention substantially as claimed. Mattaway discloses *a method for using multiple network addresses for interprocess communication through a common physical layer, comprising: creating a first interprocess communication data structure associated with a first network address on a first network device [see Mattaway, Col. 23, lines 1-10]; establishing a first communication between the first network device and a second network device using the first interprocess communication data structure and the first network address, wherein the first communication passes through the common physical layer for the first network device [see Mattaway, Col. 23, lines 2-5]; creating a second interprocess communication data structure associated with a second network address on the first network*

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device, wherein the second network address is different from the first network address [see Mattaway, Col. 24, lines 37-40]; and establishing a second communication between the first network device and a third network device using the second interprocess communication data structure and the second network address [see Mattaway Col. 24, lines 29-40]. However, Mattaway does not explicitly disclose creating a second interprocess communication data structure associated with a second network address on the first network device, wherein the second network address is different from the first network address and establishing a second communication between the first network device and a third network device using the second interprocess communication data structure and the second network address the second communication passes through the common physical layer for the first network device.

6. In the same field of endeavor, Zhang discloses (e.g., multiple network connection from a single PPP link with partial network address translation). Zhang discloses *creating a second interprocess communication data structure associated with a second network address on the first network device, wherein the second network address is different from the first network address and establishing a second communication between the first network device and a third network device using the second interprocess communication data structure and the second network address the second communication passes through the common physical layer for the first network device [see Zhang, Figure 4, Col. 4, lines 65-67 and Col. 5, lines 1-50].*

7. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Zhang's teachings of multiple network connection from a single PPP link with partial network address translation with the teachings of

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Mattaway, for the purpose of allowing the multiple processes to communicate or pass through the same common physical layer for the first device.

8. Regarding **claim 2**, Mattaway-Zhang discloses a computer readable medium having stored therein instructions for causing a central processing unit to execute the method of Claim 1 [see Mattaway, Col. 4, lines 35-67 and Col. 5, lines 1-13]. By this rationale **claim 2** is rejected.

9. Regarding **claim 3**, Mattaway-Zhang discloses wherein the first interprocess communication data structure is a first socket comprising: a first socket descriptor with which a first process on the first network device accesses the first interprocess communication data structure (The Examiner takes Official Notice (see MPEP 2144.03) that socket descriptor that identify a network address are extremely well known in the art); and the first network address. By this rationale **claim 3** is rejected.

10. Regarding **claim 4**, Mattaway-Zhang discloses wherein the second interprocess communication data structure is a second socket comprising: a second socket descriptor with which a second process on the first network device accesses the second interprocess communication data structure (The Examiner takes Official Notice (see MPEP 2144.03) that socket descriptor that identify a network address are extremely well known in the art); and the first network address) and the second network address. By this rationale **claim 4** is rejected.

11. Regarding **claim 5**, Mattaway-Zhang discloses wherein the first network address and the second network address are Internet Protocol addresses [see Mattaway, table 6]. By this rationale **claim 5** is rejected.

12. Regarding **claim 6**, Mattaway-Zhang discloses wherein the step of creating the first or second interprocess communication data structure includes calling a reentrant socket networking

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function that allows multiple network addresses to be allocated (Mattaway teaches dynamically allocated IP addresses), [see Mattaway, Col. 6, lines 52-67 and Col. 7, lines 1-7]. By this rationale **claim 6** is rejected.

13. Regarding **claim 7**, Mattaway-Zhang discloses wherein the step of creating the first or second interprocess communication data structure includes calling a reentrant bind socket networking function that allows multiple network addresses to be allocated (Mattaway teaches dynamically allocated IP addresses), [see Mattaway, Col. 6, lines 52-67 and Col. 7, lines 1-7]. By this rationale **claim 7** is rejected.

14. Regarding **claim 8**, Mattaway-Zhang discloses *wherein the step of establishing the first or second communication includes calling a reentrant connect socket networking function that allows multiple network addresses to be allocated* (Mattaway teaches dynamically allocated IP addresses), [see Mattaway, Col. 6, lines 52-67 and Col. 7, lines 1-7]. By this rationale **claim 8** is rejected.

Response to Arguments

15. It is the Examiner's position that Applicant has not yet submitted claims drawn to limitations, which define the operation and apparatus of Applicant's disclosed invention in manner, which distinguishes over the prior art. As it is Applicant's right to continue to claim as broadly as possible their invention. It is also the Examiner's right to continue to interpret the claim language as broadly as possible. It is the Examiner's position that the detailed functionality that allows for Applicant's invention to overcome the prior art used in the rejection, fails to differentiate in detail how these features are unique. It is requested that Applicant show in further detail the reentrant functions as it applies to the modified sockets, close, bind, connect

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and getsockname, (see Applicant's specification, pages 21-30). As it is extremely well known in the networking art as already shown by Mattaway-Zhang and other prior arts of records disclosed, the claimed features as currently showed. Thus, it is clear that Applicant must submit amendments to the claims in order to distinguish over the prior art use in the rejection that discloses different features of Applicant's claim invention.

16. Applicant has had numerous opportunities to amend the claimed subject matter, and has failed to modify the claim language to distinguish over the prior art of record by clarifying or substantially narrowing the claim language. Thus, Applicant apparently intends that a broad interpretation be given to the claims and the Examiner has adopted such in the present and previous Office action rejections. See *In re Prater and Wei*, 162 USPQ 541 (CCPA 1969), and MPEP 2111.

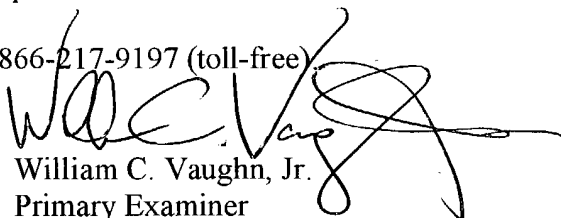
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Vaughn, Jr. whose telephone number is (703) 306-9129. The examiner can normally be reached on 8:00-6:00, 1st and 2nd Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on (703) 308-5221. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


William C. Vaughn, Jr.
Primary Examiner
Art Unit 2143
17 Sept 04